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Dodge et al.

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[54] **METHOD AND APPARATUS FOR THE DESTRUCTION OF VOLATILE ORGANIC COMPOUNDS**

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[52] **U.S. Cl.** **60/39.02**; 60/39.12; 60/39.27; 60/731; 60/733; 422/182; 431/5

[58] **Field of Search** 60/39.02, 39.06, 60/39.07, 39.12, 39.23, 39.27, 731, 733, 746, 760; 422/182, 183; 431/5, 353, 352

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[57] **ABSTRACT**

A system for the destruction of volatile organic compounds while generating power. In a preferred embodiment the system comprises a combustor and a reaction chamber connected to an exit of the combustor. A primary inlet to the combustor supplies a primary fuel to the combustor. A secondary fuel, comprising air and an amount of one or more volatile organic compounds, is supplied to a compressor, which compresses the secondary fuel and directs the secondary fuel to the combustor and the reaction chamber. The system is suitably configured to enable the stoichiometric reaction of the two fuels in a manner sufficient to destroy the volatile organic compounds contained in the secondary fuel and power a turbine engine connected to an exit of the reaction chamber.

2 Claims, 5 Drawing Sheets